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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/694,010 | 10/28/2003 | Yuzo Hioki | 244582US3 | 3721 |

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| EXAMINER |
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VANAMAN, FRANK BENNETT

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| ART UNIT | PAPER NUMBER |
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3618

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/694,010

Applicant(s)

HIOKI, YUZO

Examiner

Frank Vanaman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Status of Application

1. Applicant's amendment, filed Dec. 27, 2005, has been entered in the application. Claims 1-7 are pending, with claim 7 having been newly added.

Claim Rejections - 35 USC § 103

2. The portions of 35 USC §103 relied upon herein can be found cited in a previous office action.
3. Claims 1, 2 and 5-7 are rejected as under 35 USC 103 (a) as being unpatentable over Hayashi (US 6,655,483, cited previously). Hayashi teaches a motor driven vehicle having a driver's seat (10), a lateral pair of front wheels (2), a lateral pair of rear wheels (3), the rear wheels being connected to a rear wheel axle (not referenced, shown between rear wheels 3) which extends on either side of a case (on the axle, figure 1) which is positioned to one lateral side (rightward) of the vehicle, the wheels driven by a motor (12) positioned towards another lateral side (leftward) of the vehicle, the vehicle further including a battery unit having a plurality of batteries arranged side-by-side (see figure 1) in a longitudinal direction, and being positioned at a central location thereon; the vehicle further including a controller (13) for controlling current from the battery to the motor, the elements being arranged to fall within a boundary delimited by the inside borders of the wheels (2, 3), and forwardly of the rear axle, and rearwardly of the forward axle; the vehicle further including a charger (14) positioned above the battery unit as seen in elevation.

The reference to Hayashi fails to explicitly teach the case connecting the motor with the rear axle as being a gear case. Inasmuch as gearing is a very old and well known means for transferring drive force, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the case already taught by Hayashi with a gear set (e.g., rather than a chain drive) for the purpose of providing a long lived transmission means for transmitting torque from the motor to the wheels.

As regards claim 6, the reference to Hayashi fails to explicitly teach the tires as being wide width and low-pressure balloon tires. In that such tires are very well known

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for applications involving the traversal of soft ground, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the vehicle of Hayashi with low-pressure wide width tires to facilitate motion over soft ground surfaces.

As regards the specific recitation concerning "rough road driving" the examiner notes that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi in view of Lamoreaux (US 4,655,307). The reference to Hayashi is discussed above and fails to teach a protection member located beneath the gear case. Lamoreaux teaches a protective cover (37) positioned so as to be beneath the operating components of a four-wheel, rough road vehicle (figures 1-3). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a protection member as taught by Lamoreaux under the vehicle (and thus the case) taught by Hayashi, for the purpose of protecting the vehicle components from damage under use.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi in view of Scaduto (US 5,686,818). The reference to Hayashi is discussed above and fails to teach the provision of the controller arranged at a front of the vehicle. Scaduto teaches a vehicle wherein a plurality of batteries (1) are arranged in a longitudinal progression (figure 1) with a controller (2) at a forward end thereof. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a forward-located controller to the vehicle taught by Hayashi, as suggested by Scaduto,

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for the purpose of locating the controller in a position which allows easy access for repair, and maintaining short power line lengths for the DC component (i.e., to/from the batteries) of the supply structure.

Response to Comments

6. Applicant's comments have been carefully considered. As regards the limitations which applicant has added to the claims, the examiner agrees that the previously applied reference to Nakamori fails to teach each and every limitation now recited in the claims. Note the reference to Hayashi, cited previously in the prosecution, and now applied in direct response to applicant's amendment.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

8. Any inquiry specifically concerning this communication or earlier communications from the examiner should be directed to F. Vanaman whose telephone number is 571-272-6701.

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Any inquiries of a general nature or relating to the status of this application may be made through either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


A response to this action should be mailed to:

Mail Stop _____
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450,

Or faxed to:

PTO Central Fax: 571-273-8300

F. VANAMAN
Primary Examiner
Art Unit 3618


3/6/02